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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,875	07/07/2004	Shiro Dosho	60188-891	1177
7590 09/15/2005			EXAMINER	
Jack Q Lever Jr McDermott Will & Emery 600 13th Street NW Washington, DC 20005-3096			LE, DINH THANH	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application N . 10/500,875	Applicant(s) DOSHO ET AL.	
	Examiner DINH T. LE	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/7/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

Figures 32-35 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections

Claim Rejections - 35 USC § 112

Claims 1-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 1, it is unclear what the “given rate” on line 6 is, where the “first current” comes from, how the circuit element can allow the first current flow on line 4, and how the recitation “first filtering means”, “circuit element”, “current generating means” and “second filtering means” is read on the preferred embodiment. Insofar as understood, no such means is seen on the drawings. The same is true for claims 23 and 26.

In claim 3, it is unclear what the “first and second semiconductor elements” are and how the second semiconductor element can “accept” the first current and second current.

In claim 4, the recitation “circuit element is a resistive element” on line 2 and “said current mirror circuit accept a third current” on line 4 is misdescriptive because it is inconsistent with what is recited in claim 3. For example, claim 3 has recited on line 7 that the circuit element is the first semiconductor element and the current mirror accepts the first current on line 5.

In claim 8, it is unclear how the bias currents can be “changed in amplitudes” since no means for providing changing function is recited in the claim. The same is true for claim 11

In claim 9, it is unclear how the recitation “said second through nth . . . second current” on lines 2-8 is read on the preferred embodiment. Insofar as understood, no such limitation is seen on the drawings.

In claim 10, it is unclear where the “supplied first bias current” and “second bias current” come from, how the circuit element can be “a resistor ladder circuit” instead of the resistive element, how the resistance value can be corresponding to the first conductance and can be “changed” accordance with the change of the first conductance and how the first conductance can be “changed”. The same is true for claims 12, 15 and 17.

In claim 11, it is unclear where the “common bias control signal” comes from, what the “basis” is and how the converters can change the conductance on this basis.

In claim 12, the recitation “said first current cut off” on line 6 lacks clear antecedent basis.

In claim 14, it is unclear how what the “basis” on lines 6 and 8 is. The same is true for reciting “basis” in claim 15.

In claim 16, it is unclear what the “given time constant” is and how the inverting amplifier can have a time constant.

In claim 23, the description of the present invention is incomplete because the first low pass filter unit and the second low pass filter unit are not connected to anything. Thus, the claimed low pass filter may not perform the recited function. The same is true for claim 37.

The remaining claims include a number of unclear recitations and antecedent basis problems as pointed out above. These claims should be clarified or corrected.

Allowable Subject Matter

Claims 1-44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The claims are allowed because the prior art of record does not suggest “an adding means for adding said first voltage and second voltage to output an output signal.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY CALLAHAN can be reached at (571) 272-1740.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Dinh Le', with a long horizontal flourish extending to the right.

DINH LE
Primary Examiner